

In the specification drawing of Latina '219, figures 1 and 2, it is clear the opening where the hand is inserted inside the outershell is at an approximately 90 degree perpendicular angle in relation to the upright portion of the outershell, not the 40 degree alignment as proposed in my invention.

It is the realignment of the lines of force applied to close the outer edges of the glove, that my invention proposes, that increases the closing leverage of my glove design over Latina's.

The increased closing leverage over Latina's prior art, is provided through the geometrically aligned lines of force used to close the two outer edges of the outershell glove. If you examine Latina '219, Figure 1 and 2, and his specifications and claims, you find no reference to any concept of the best alignment of the hand within the glove, to increase closing leverage or increase the area where the ball does not impact the hand.

In Latina's specification the lines of force when applied to closing the outer edges of the glove around a caught ball are distributed in only small part directly to the outer edge of the finger portion, but align to a greater degree along the top edge of the glove. The last finger or baby finger is the only digit aligned to close the outside edge of the finger portion towards the outside edge of the thumb portion. The lines of force of the remaining three fingers progressively diminish away from the outer edge and increase progressively towards the top edge of the glove. This arrangement in Latina's art is adequate to close the two outer edges together to trap the ball, whereas my ergonomic approach maximizes the leverage applied by the fingers and thumb to close the glove to trap and hold the ball. This diminishes the possibility of the ball escaping the glove through ricochet off the pocket/web area, or being dislodged by impact with a base runner being "tagged" by the fielder.

Latina's positioning of the hand within the outershell glove is similar in effect to a hand or claw closing around a round object. The lines of force of the fingers within the finger portion of the outershell glove applied under Latina's orientation are not aligned directionally to move in a direct 180 degree relationship to the lines of force applied by the thumb to close the edge of the thumb portion of the outershell glove.

In my invention all four fingers of the hand are aligned towards the outer edge of the outershell glove, due to their geometry in the MCS, to fully apply their lines of force in closure to move the outer edge of the finger portion of the glove at approximately 180 degrees towards the corresponding line of force applied by the thumb, in the thumb portion of the glove. This combination of forces, aligned at approximately 180 degrees, maximizes the leverage used to close the outer edges of the glove to trap the ball. This motion and alignment is similar to closing a bare hand around the cylinder of a can of soda. This is distinctly unique to my invention and applies the laws of physics relating to the principle of leverage to greatest advantage to close the edges of the glove in a way not implied nor anticipated in Latina's prior art.

5 It is clear from the drawings and the specifications and claims of Latina, that lines of force are not considered and that the innate lines of force of Latina's invention follow the less efficient "claw around a ball" rather than more efficient "hand around a can" analogy.

10 Nowhere does either patent '176 or '219 by Latina make any claim to increased closing leverage by the alignment of the lines of force of all four fingers closing the outer edge of the finger portion of the glove towards the thumb edge. It is the closing of the outer edges together that most effectively traps the ball within the glove.

15 Latina '176 specifically describes a catcher or first basemen's mit. My invention refers to a fielder's glove. These are distinct tools of the sport, much the same as a driving "wood" is distinguished from a pitching wedge in the sport of golf. This alone may disqualify comparison between my invention and Latina's invention described in '176.

20 In Figure 1 of '176 there is a drawing of the compartment that holds the hand. It has a visual appearance of a 90 degree angle between the thumb compartment and the index finger compartment. But there is no statement that it is intended to be a 90 degree angle in the specification or claim. More significantly, the cut-away drawing in Figure 2 shows clearly that the relationship of the thumb and index finger within the hand compartment is not 90 degrees, but a much reduced angle.

25 Neither is there any description or claim in Latina's said inventions regarding that of increasing the web/pocket area of the glove within the same overall outside dimensions of the glove. By the plus or minus 40 degree shift in alignment of the MCS in my invention, the web/pocket area, where the hand won't be impacted by a thrown or hit ball is increased by 30 to 50%. This is a safety feature not considered by Latina's prior art.

30 I will next address the rejection of my claims 5 and 6

35 My art is distinguished from both Synek 362, and Clevenhagen 880 in several unique ways.

40 In both Synek, Figure 1 and 2, and Clevenhagen Figure 1 and 2, the web art relies on a central solid disk of material with rays of material attached to and radiating out from the disk. In both, those rays are crossed laterally point to point, by concentric rings of material that expand out in several layers from the central disk. The term spiderweb, as used by Clevenhagen, is an accurate description of both webs.

45 My art is distinct in that it relies on a hollow ring of material, rather than a solid disk, and requires no cross member lateral support to achieve the desired netting effect offered by my design..

The hollow ring offers a superior application of the principals of physics relating to action/reaction, to reduce the force of ricochet from a ball impacting the center of the web, and offers other advantages as well. The centralized surface area of the solid disk itself, as described in the previous art, creates a greater ricochet force upon impact by the ball than does my use of the ring design. Because of the hollow area of the ring in my invention, there is no surface area for the ball to impact, and ricochet from. The hollow ring itself can be made proportionally larger up to a diameter that still does not allow a ball to pass all the way through the ring, and escape out the back of the glove. The larger the ring, the less surface area, the greater the benefit to reducing ricochet. If the diameter of the spiderweb's central solid disk is increased, the opposite effect is created: that of increasing the force of ricochet. This demonstrates how the two approaches rely on different or inverse principles of physics to achieve their respective results.

Additionally, and coming from the above, employing a ring in the advantageous diameters allowed, in place of a disk, allows for increasing the girth of the straps making up the legs of the star web. The overall web maintains its desired flexibility, without the necessity for the lateral members of the spiderweb designs, needed to reinforce the rays or radial legs of the spiderweb.

Neither of these advantage and unique characteristics were described or anticipated by Synek or Clevenhagen

Another unique aspect of my art compared to Clevenhagen and Synek is also a result of using a ring over a disk, as the centerpiece of the web. The individual legs of the starweb in my design are a single strap of material that is passed through and folded back over the ring; both ends of the single strap then attach to the outer edges of the valley between the thumb and finger portions, and the span of material that bridges the top of the valley between the thumb and finger portion.

In the webs of the prior art, there is greater number of individual pieces to create the web, a greater number of areas that require stitching, a greater number and complexity of dye cuts required, and a greater amount of labor overall to achieve the results they describe.

My starweb design offers the manufacturer a greatly simplified construction process and reduces the number of pieces required to construct and assemble the web. Compared to Synek and Clevenhagen. This significantly reduces the cost, quantities of materials, dye cutting complexity, and the use of special materials.